THE DEPARTMENT WOMEN

Their Hard Battle for Recognition by the Government.

The Employment of Females in the Public Service Began During War Times - Demonstrated Their Tact, Ability, and Efficiency- Men Given Preference In Certain Instances.

The Postoffice Department, it is said, has done more to encourage women to sock employment in Government service than all of the other departments combined. Forty years ago the number of women employed Pension Office. by the Government was so insignificant and

"Whenever a vacancy has been made by
a female employe of late it has been the
practice to fill it by the reinstatement of a were never taken into consideration. Today there are many thousands of women Chrence G. Allen, acting chief of the appointment division of the Interior Deservice, which it was formerly contended parament, said that he knew that the Geocould only be properly occupied by men.

To overcome the strong prejudice that The oversceine the strong prepared to the component of the same of the strong prevalled against having someth in office, and the thoroughly rooted belief that a typewriters and strongraphers they were woman could not do clerical and executive given the preference. He said that the Peusion Office and Land Office had been present by the work pearly as well as a man, the women of the country had to struggle hard, but pirshed very nearly all that they

During the Civil War the Government found that it required the services in the field of many of his brave clerks and offifield of many of his brave cherks and official heads of divisions. The Government
also saw the necessity of providing, as far
as possible, for the widows and orphans
caused by the war. The specing for this
fatherly care came when the male clerks
went to the front, and the women were
given inferior places. Since their, by an
exhibition of fidelity to their inhors, ability
to perform them and an aptitude for premotion, the number of women employes
has been constantly increased.

more women than men had been appointed,
but he attributed this to an unusual demand for utenographers. In the Postoffice
women more efficient than men, but he added that in the filling of a vacancy the request of the chief of the division is usually
to perform them and an aptitude.

The First Assistant Postmaster General
said that he women were
women than men had been appointed.

has been constantly increased.

August W. Matchen, superintendent of the free delivery mail system, has made the imployment of female cierks a subject of careful and miduaed study, and the re-sult of his observations in the Postoffice Repartment must be gratifying in the women workers. Mr Matchen believes ab-solutely in woman's worth, repacity, and general fitness to perform the duties as-vised by the forcement resulting.

general fitness to perform the distinct as-nigned her in Government positions.

When, after the outbreak of the Civil War, women were employed, they were as-nigned to the lowest grade of clerical work, such as cutting coapons off hands, counting bills, and cupying documents, and their salaries ranged from 4580 to \$500 a year. Those who received this maxim amount were very few.

A Theory Against Women,

The records in the appointment clerk's office of the Postoffice Department show General acted upon the theory that one male clerk was equal to two female clerks, make chers was equal to two inchase clears, and he therefore appointed two women at \$500 each to fill the vacancy caused by the withdrawal of a make ciers, who had received \$1,200 a year. This practice continued for quite a fong time, and General Zevericy believed the theory a correct one until his eyes were opened in the dead letter of the dead letter of the control of the dead letter of the control of the control of the control of the dead letter of the control of Male sterks in this division had been accustomed to turn in 125 lett rs at-tended to as a good day's work. The in-mule clerks appointed to do this work raised the standard to 250 letters a day and when General Zeverley recover-ed from his astonishment, he issued an order to the effect that upless male clerks could keep up to this standard they would be deemed inefficient and he would remove

The innevation of women cierks in the Death by Drowning and Starvation departments met with much opposition from the male cierks. So bitter did this opposition become that Congress was trequently appealed to and it was not until iter fight that lasted for years wictorious and that their right to receive Government employment was firmly established. From the time that the debated question was firmly satisfactorious was firmly established. From the time that the debated question was firmly established. From the time that the debated question was firmly established from the water. The dog was very handsome, and the man had been admirting the maximum and the efficiency of their work in the departments has constantly increased. Congress, during the for five the maximum salary for women cases at 1000 a year, but in 1970 this was band and the minimum salary for women and the maximum salary for women cases at 1000 a year, but in actual money is found in the letters opened in the Dead Letter Office. A vastly larger amount is daily represented by drafts, money orders, and other conventional paper. This actually amounts to the water. To see what further might happen, the spectator returned to the lake's brink and soon the dag was back again and the maximum salary for women and the minimum salary for women the maximum salary from the water. The dog was very handsome, and the maximum is daily represented by drafts money orders, and other conventional paper. This actually amounts to the water the part of the pa

of Congress was Hon. O. P. Morion, of Indiana.

As an illustration of the character of work now being performed by female clerks, attention is called to the Free Definers. Division of the Postoffice Department. Five years ago the highest position in the department that a woman might aspire to fill was that of stenographer. Today the work has been distributed among the alerks, regardless of sex, and the greater portion of it requires judgment, execution, ability, tast, and diplomacy. One woman hardles all matters pertaining to the grometion and removal of letter carriers, distance and the correspondence relative there, there are the down as winning fast away from shore, his head, as before, held under water. His rescue jump i into a boat and palled hard for where the dog was struggling, but was to his serrow, too late. The lifeless body already floated on the mater. An autopsy proved that the "rash and the correspondence relative there are the dog was consequently surmined the dog s back. The poor fellow was swimming fast away from water. His rescue jump i into a boat and palled hard for where the dog was struggling, but was to his serrow, too late. The lifeless body already floated on the missing but was to his serrow, too late. The lifeless body already floated on the water. An autopsy proved that the "rash and the dog was consequently surmined the dog s water given water. His rescue jump i into a boat and palled hard for where the dog was crugally hard for where the dog was crugally hard for where the dog was truggling, but was to his serrow, too late. The lifeless body already floated on the water. An autopsy proved that the "rash and the dog was consequently surmined the dog was truggling. The lifeless body already floated on the water. An autopsy proved that the "rash and the dog was consequently surmined that the "rash and the dog was consequently surmined that the dog was consequently surm considers all data relating to it, passes riers are employed, and conduct the correspondence bearing upon these subjects. The deliberate suicide of a valuable Newbooks and accounts of the division, covering the annual expenditure of about \$11.000,000, are kept by an accomplished young woman whose line excentive ability and 000,000 are kept by an accomplished young woman whose fine executive ability and

the interior Departments and in the other branches of the Government service. It is said, however, that, notwithstanding the rapid advancement of some employes and the excellent character of their work, during the last two years, there has been an evident intentior on the part of officials to fill all varancies by maje appointments, and that even where the part of officials to fill all varancies by maje appointments, and that even where the part of officials to fill all varancies by maje appointments, and that even where the particle is made to do any harm.

"The nurse however, run up and beat him with her handkerchief, according him aid telling him he should not go with them for their walk, and when he tried

"I think that as the civil service gets older the greater will be the decrease of the appointments of women to positions in the departments," said Frank A. Vander. In Assistant Secretary of the Trensury, to a reporter of The Times. The semark was the obscome of a question put to Mr. Vanderlip as to whether there is an understanding or agreement, express or in
Nearly all records of canine suicides have

such as those employing counters, where definess is a necessary qualification. no are given the preference by the

bureaus like that of the Auditor's offire the proportion of men appointed is greater than that of women, and Mr. Van-derlip added that he thought it would contimes so, subject to the cityl service rules. feelings of animals and our own."

such divisions. Mr. Vanderlip said, the n such divisions, Mr. Vandering said, the sellef of the chiefs is that men make more flicient employes than women. The Ac-istant Secretary denied that the depart-nent less any desire to substitute men for somen when the one was as efficient as

Men in the Pension Office.

H. Clay Evans, Commissioner of Penions, said in relation to this question that the lass now 450 women in his department and that the number will not be increased. "The duties of the employes in the Pension Office." he said, "relate purely to legal and medical questions, and it is difficult to teach women, especially the older ones, the technical knowledge required. Therefore, for the work here I want men when law ordain them. When I was First Assert of the character of the law of t I can obtain them. When I was Pirst As-sistant Postmaster General I had many women under my direction who were very efficient in performing their duties, but the class of work in the Postoffice Depart-ment is different from that done in the

legical Servey and Patent Office preferred women to men for employes when practi-cable. He knew that no discriminations Indian Office there had been no discrimina

Views of Mr. Heath.

Perry Heath, First Assistant Postmaster General, said that during the last are weeks

part of anyone to discriminate against the appointment of women. Some remand, alteged by division chiefs, for not wanting women to fill executive positions, are that many men having husiness with the de-partment do not like to transact it with a woman. Some men feel a restraint placed on them when this is necessary, and others may be uncouth and in an undestrable con-dition for women to meet. "All kinds of people come here." be said, "and they must be attended to. He frankly said that be believed that in filling any vacancy, preference should be given a veteran over a woman, but as an evidence that there is no discrimination against women he sale that the temporary roll, which does not require the approval of the Civil Service names, twenty-four of which are those o

that when female clerks were first em-ployed the Third Arsistant Postmaster on so many men of late have been ap-pointed to vacancies created by women."

The accretary said that the number of are secretary said that the biliness of original appointments was small, except for stenographers, but admitted that the number of reinstatements of men had been large. Of the stenographers that had been appointed after civil service examination there were II women in 1897, and 14 in 1898, as against 62 men in 1897, and 62 in 1898. As to the appointment of derik. 1898. As to the appointment of clerks.
21 women were appointed in 1897 and 6
in 1898, as against 34 men in 1897 and 50
in 1898. All of the females were appointed
to clerkships out of Washington. Seventythree men were also appointed to posi-tions out of this city, but eleven obtained good places in the departments here, and the women obtained none.

SUICIDES OF DOGS.

Dellberately Chosen,

(From the London News.)

The papers report that a dog committed suicide the other day in the Lake of Comm. He was determined to end his life, for a must pulled him out when the abrogated and male and female clerks pulled him to shore and made him out off were placed on the same salary basis. One of the most forceful advocates of this act

to, makes rulings and passes upon impor-tant questions that continually arise. An-other has direct charge of the distribution of the letter carrier force, prepares and ly painfully, for a spring, and fell into the river. The spectator held out a stick to the dog, but he turned away and without a struggle was washed rapidly down

woman whose line executive ability and special qualifications have more than once placed her in full charge as division super-intendent, acting in the absence of the superintendent and his assistants.

The informant said he perintendent and his assistants.

In Other Departments.

The same degree of proficiency has been attained by women in the Treasury and the Interior Departments, and in the other

F. P. Cobbs pells the following story,

Vanderlip as to whether there is an understanding or agreement, express or implied, among the heads of departments to substitute men for women amployes. In replying to this interregation, Mr. Vanderlip said positively that so far as the Pressury Department was concerned there were an auch understanding, and that the desartment is not following the practice of substitute of the practice of the cases above partment is not following the practice of the cases above stated. The substitute men to this on some of the cases above partment is not following the practice of the cases above stated. partment is not following the practice of substituting male for female employes. He qualified this denial considerably, how-ever, by saying that the filling of vacan-cies very largely depends upon the chiefs that the short pain of death was better that the short pain of death was better cies very largely depends upon the chiefs of divisions and bureaus, that they are the people who have charge of the work and who are responsible for it, and that they do demand generally that a man shall be appointed to fill a vacancy. Because of this reason. Mr. Vanderlip said, there was likely to be more call for men than for women, although its some of the divisions, such as those employing counters, where when a few strokes of his paws would save him, is most annaing." Elsewhere this true dog lover savs: "As thought is still thought, in whatsoever brain it is carried on, and love is love in every breast which

THE DEAD LETTER OFFICE

Its More Commodious Quarters in the New Building.

Eight Divisions Busy Hundling Stray Postal Matter-The Museum Now Incorporated With the Depart. ment's General Exhibit-The Aunual Sale of Unclaimed Matter.

the room necessary should be provided, ver, for the department's use, is open.

The Dead Letter Office is organized in rine from Letter Omice is organized in-eight divisions for the bindling of its dif-sient classes of matter. These are separ-ued by iron wire feating, so that white lettached from each other so far as the mussiction of business is concerned, they

light.

In the old building, this department conducted a museum in which was displayed a variety of objects from a lock of hair to bottles of poison. Knives, pistols strices, articles of custile.

sent to the Dead Letter Office. As there is no room for this museum on the third floor of the building, it has been incor-Letter Office and it was deemed inadvisable to keep up two exhibits of substantially the same general character. Each year in December, generally a week

preceding Christmas, the department has an auction sale of property and matter for which it has been impossible to find an owner in the two years preceding the sale. Matter received without address, however, Matter received without address, however, is held only six months prior to the sale. These auctions are conducted by the auctioneer firm of the city making the lowest bid of percentage for conducting the sale. But for these annual cleanings out the collections would soon become so immense that it would be simply impossible to preserve them.

The agreement receives from each sale.

The aggregate receipts from each sale amount to approximately three thousand dollars. Before the sales a catalogue is prepared, in which everything to be sold entered. But a package submitted for sale is not necessarily in the same form as it was when received. Numerous arti-cies of the same general character are often included in one package, and the catalogue included in one package, and the catalogue gives a description, necessarily a very general one, of its contenia. This is intended to prevent, so far as possible, any imposition upon the purchaser. For example, a parcel may be offered containing "cheap jewelry." Of course it is impossible to define the degree of cheapness, but enough is done to put the buyer upon his guard. The officials do all in their power in order that the Government shall not become party to any fraud. The money derived is

department.

Money Found in Letters. In this connection it may be said that generally about one hundred dollars a day

This department is constantly in read of letters containing money and stamps of letters containing money and stamps of letters containing money and stamps of the craft case of fraddlent concerns no longer and make to the weaker side of human nature:

There the simulating headline "5.009 from his companions and guides and moved in that direction. After a weary and dangerous climb he arrived at a promontory of rock and earth. Close upon the far cellence and "selling as high as \$10." for this point a great river of lava was gether with a cake of soap combining all the perfections. Is offered for the sum of the perfections. Is offered for the sum of the perfections in sliver or stamps, the avowed the most interesting separated from the companions and guides and moved in the form of a liquid we can buy it as such in the market, and we can also obtain it as a solld mass, the change of state from gas to liquid and from liquid to solid being a mere matter of cooling. It is therefore quite in accordance with our general experience that air also should be capable of existing as a gas or as a liquid, or as a solld, according to its despect of existing as a gas or solid, according to its despect of experience that air also should be capable of the point of some informal monster, was story paper onered a set of table ap-ver," twenty-four pieces, "of artistic de-sign and heavily plated," for the munifi-cent sum of ten cents in cash or fifteen cents in stamps, "Five thousand lovely decorated ten-sets" were to be given away. to those who should send lists of subscrib-ers to a certain publication, and "len cents, silver or stamps, to help pay cost of advertising."

Another Scheme.

another concern for miscellaneous names and addresses, which it was in the habit of furnishing to "publishers and dealers," and it offered \$5 per hundred of such, a triffing preliminary on the part of the col-lector being the forwarding of ten cents for blank book and instructions. A full-sized box of "our wonderful pelicis," with

But if I still remain, as others do.

Trusting the playwright, witting with my friends.

Methods the story will prove ever and true, And I shall read the meaning as it ends.

-Richard Burton.

NO WASTE IN THE COCOANUT. net Are Dullized.

(From the San Francisco Chronicle.)

A Chinese proverh says that the coconnut tree has as many proporties as there
are days in the year. The fruit of the
tree is the only part imported into California, and it is now put to many and
widely different uses, not one atom being
thrown away. One local importer receives
about 200,000 cocomputs a menth. Only a
small portion of them is kept for the
"green trade," as it is called when the
nut is sold in its original state, the greater
buik passing to the factory, where the husk
is removed and the inner nut is steamed
to facilitate the removal of the (From the San Francisco

The bead Letter Office is now located in its quarters on the third floor of the meat. About thirty-five boys and girls are employed there in peeling on Seventh Street, this department was scattered about on various floors and in sundry corners and its work was necessarily hampered. Now the working force is in close association. In order that all the nut, after being washed, is thrown into different machines to be ground according the room necessary should be provided, the general corridor was closed and there is now no public passage around the building on this floor. This permits the necommodation of the full force of about 115 percens. A five-foot passageway, however for the destroyer was forced by the destroyer for the percent. is used in the cooking. After the nut is sufficiently cooked—that is, when the moisture has wholly evaporated, the pulp is placed in shallow iron pans and dried in drying closets, and the "desicrated co-

hair to bottles of poison. Knives, pistols, watches, articles of ciothing, infermal machines, petrified snakes, soldier buttons, and, in fact, almost anything that could be enclosed in a maliable package, were included in the exhibit.

Many Articles Confiscated.

Many articles probibited by law from being malled are at once confiscated and sent to the Dead Letter Office. As there but there is every indication that at no distant time a new industry will be dependently sanitary, and springy material is being made to serve as a substitute in mattress making for the unuanitary curied hair. The husk of the cocoanut shell contains a fibrous material which really makes excellent furniture and mattress filling. It is infinitely superior to sholdly. This the dustry is only in its infancy on this coast. Twenty-five per cent of the husk is half of fibre, the rest is dust; but not even this dust is wasted, for quirkeymen have found that it makes an excellent covering for winter flower beds. The first process through which the busic is not even this dust is wasted, for quirkeymen have found that it makes an excellent covering for winter flower beds. The first process through which the busic is not even this dust is wasted, for quirkeymen have found that it makes an excellent covering for winter flower beds. The first process through which the busic is not even this distant time a new industry will be devictioned with rival in magnitude the telegraph, telephone, and electric light interests of the country.

The Compressed Article.

"Here, then, we see the tremerdous advantages which liquid air wajoys over compressed air it gives us five interests of the country.

The Compressed Article.

"Here, then, we see the tremerdous advantages which liquid air wajoys over compressed air it gives us five interests of the country.

The Compressed Article.

"Here, then, we see the tremerdous advantages which liquid air wajoys over compressed air it gives us five interests of the country.

The Compressed Article.

"Here, then, we see the tremerdous advantages which liquid air wajoys over compressed air is gives us five interests of the country.

The Compressed Article.

"Here, then, we see the tremerdous advantages which liquid air wajoys over compressed air is gives us five us five interest of the telegraph, telephone, and electric light interests of the country.

The Compressed Article.

"Here, then, we see the t dustry is only in its infancy on this coast. Twenty-five per cent of the husk is hair or fibre, the rest is dust; but not even this dust is wasted, for nurserymen have found that it makes an excellent covering for winter flower beds. The first process through which the husk is put is that of crushing. This is accomplished by a machine resembling a rock crusher, and sounding very much like one when a work, driven by a forty horse nower engine. driven by a forty horse power engine. This is called the picker. The husk comes out of it as dust and course hairlike fibre, with here and there a remnant of shell. This is picked over by boys and thrown again into the picker.

tion of it is twisted into a rope by a ma-chine called the twister. When about a hundred feet of this rope is made it is ited up into a bundle and hung in a steam box. After being thoroughly steamed, these bundles are dried in a room heated to 120 degrees. While so treated the fibre is still kept in the shape of rope. It is by this process that the fibre is curied and gets its springy quality. The twisted fibre is then put through the picker a third time, and when it is thrown out it looks as liebt. try to any fraud. The money derived is then put through the picker a third time, turned into the Treasury of the United and when it is thrown out it tooks as light States through the finance division of the as down, and settles into the sweetest, tains its pleasant woody and spicy which alone ought to make it an ideal mawhich alone ought to make it an ideal ma-terial for mattress filling independent of its more important sanitary properties. The price of this cocoanut fibre ranges from 2 1-2 cents to 10 cents a pound. It has lately been listed as an article of com-merce, so that it is now one of the ca-tablished industries of this coast.

THROUGH LAVA ON STILTS.

Mr. Watson sat for a considerable time, probably a couple of hours, garing upon the vast extuary of rolling flowing, bursating fire rushing down the side of the mountain. Some thousand or more feet below this arream entered a thicket of trees which. Mr. Watson observed through his glasses, seemed to have wonderful power of resisting the attack of the flames.

Toward night he arreas from his accordance with the reference of the resisting the attack of the flames.

Changes in Matter.

"There is something else that we know by common experience with regard to the changes of state experienced by matter.

We see that gases are bodies that are self-expansive and that therefore exert more or less pressure upon the sides of the vessels.

Toward night he arreas from his self-expansive and that therefore exert more or less pressure upon the sides of the vessels. could see such a stegum in whichever quarter he might look; so the west forward.

But he had not been mistaken. While he had some and in the head not been mistaken. While he had some and in which he had some and in which he must go, with his eyes on the flowing stream, enchanted with its marking stream, enchanted with its marking of the crater, and some feet to the north of the one he was watching a second flow. He started on down and had proceeded several hindred feet, when to his horror and ampagement he discovered. could see such a stream in whichever quar-

NO WASTE IN THE COCOANUT. FACTS ABOUT LIQUID AIR

An Inventor Disposes of Some Mistaken Theories.

Dr. Stephen H. Emmons Offers a Popular Explanation of the New Power Derived From Constitutents of the

powers. A few months ago it was be- A Matter of Chemical Composition. lieved that in the new agent perpetual motion had been discovered, which would en- cal composition and regard liquid air in tirely revolutionize present methods of a purely physical aspect, we are at once power production. While it is generally struck by a very singular fact of great admitted by scientific men who have made importance from the point of view of mea careful study of the new fluid, that its chantest power. A liquid is a non-expanapplication will eventually displace steam sive body, that is to say, its molecules are and electricity to a large extent, it is not to such close proximity to each other that

have been made which plainly indicate the opening of a new industry.

uses this despised husk in the manufac-ture of another useful commercial com-modity. It is the only factory of its kind capital in large amounts invested for profloor of the building, it has been incorporated with that of the General Postoffice
and is located on the second floor, on the
Tweitth Street side. Besides, a large portion of the curiosities in the General Postal Museum were derived from the Dead
where the converting what was previously considered was position
of peculiar importance when it is remembered that it is converting what was previously considered was previously considered was pretion of the curiosities in the General Postal Museum were derived from the Dead
where the converting what was previously considered was previously considered was previously considered to protion of the curiosities in the General Poshard to get rid of and which bid fair to
become a nuisance, into a new tender of liquid air.

The movement has been undestaken within the past few months, and preparations
have not yet been completed for placing
the liquid on the inquid on the inquid on the preparations
have not yet been completed for placing
the liquid on the second floor, on the
liquid air.

to give the public very accurate informa-tion as to liquefied air and its probable utilization as an industrial agent. well-illustrated articles in popular maga-sines have been published, and some enter-taining lectures have been delivered, but the general tone of the statements thus out of it as dust and charge hairlike fibre, with here and there a remnant of shell. This is picked over by boys and thrown again into the picker.

When it comes out a second fime a portion of it is twisted into a rope by a machine called the twinter. When about a hundred feet of this rope is made it is tied up into a bundle and hung in a steam box. After being thoroughly steamed, these bundles are dried in a room heated to 120 degrees. While so treated the fibre is still expresses that the fibre is curied and gets are considered and gets.

lecturers, the magazine scribes, and the flamboyant advertisers. Nor is it a mere scientific toy, and an impracticable natural neering editors and so-called leaders of science. It represents an imperiant step forward in the murch of industrial progress, and it as surely destined to minister to our material wants and add to the fortunes of mankind as was the case with steam recently, or any other great advance in the art of controlling natural forces.

Introducing Air Power.

"It is no wonder then that engineers are introducing air power to a greater and greater extent from year to year. Even the conservative British Government has recently decided to employ air power in monsty valuable papers stored in this the art of controlling natural forces. the art of controlling natural forces.

An Expert's Explanation.

"In order to understand what liquid air the metal parties of the constant improvement of the metal service generally, and the most interesting separatively and the first day in the line of delivering matter, it is thought that the percentage of increase in the amount of metal service generally and experiences in amount of the metal service generally and experiences that the prevention of the three three contained move of the metal service generally and experiences that the prevention of the metal service generally and experiences that two side of the most thrilling experiences that every the work of the Dead Letter Office has greatly increased during the past year, and the stand service generally, and experiences that two distributions and a service generally and experiences that two distributions and the service generally and experiences that the percentage of increase in dead letter business is smaller than the percentage of increase in the amount of metals. This department is constantly in receipt of letters containing money and stamps afforced to fradicult concerns no longer of letters containing money and stamps afforced to fradicult concerns no longer in the stimulation moder and the men camped of the party with the exception of the weaker side of human natures. A few examples will serve to concern and early the second of the ment of all the stimulation of the party with the exception of the ment of a little above two degrees. Fabrement; it becomes it.

**Last Torsius it will not replace star and elect frictly in their special sphere at it will have its above two work to do.

**While, however, it is true that liquid the proposed work of a little above two degrees. Fabrement; it becomes it.

**Last Torsius it will not replace star and election in the rittle shows work to do.

**While, however, it is true that liquid the proposed of the ment of employing huge and it is also two degrees. Fabrement; it is also two degrees. Fabrement; it is also two degrees. Fabrement; it is also the field and gastine of the ment in the surface and the second conver ter in general. The metal, lead, for ex-

ower of resisting the attack of the flames. Iess pressure upon the sides of the vessels. Toward night he arose from his seat in which they are confined. And we find the process to go over the summit own the hill and walk out between the confined with their pressure to increase with their temporal to the pressure to the pressure to increase with their temporal to the pressure to t below the rocks to go over the summit down the hill and walk out between the prature. Steam, for example, at 212 de-A consuming desire was manifested by He thought that his eyes had been restantiter concern for miscellaneous names ing too long on rubning lava and that he as the surrounding almosphere, viz, beas the surrounding atmosphere, viz, be-tween fourteen and fifteen pounds per square inch. But if its temperature be

since of the create in silver or afferee series of the cratery and some feet to the north of the come in Mane watching a mean time of the come in Mane watching and the north of the come in Mane watching and the north of the come in Mane watching and the street of do pounds per inpare inch, we need and proveded several innifered feet, when to in the contract of the pounds per inpare inch, we need and proveded several innifered feet, when to incompanied by "a handsome set of furs, gard in the extremal of action in the street had been contract to be contracted in the extremal of large and his retreat had been contract to the successful completion of skeleton in particular territory.

Extravagant prizes were also offered to the successful completion of skeleton in particular territory.

Extravagant prizes were also offered to the successful completion of skeleton in the way of remittance for a schederiphino of the inchine and his retreat had been contract to the successful completion of skeleton in particular territory.

Extravagant prizes were also offered to the successful completion of skeleton in the successful completion of s

in the same proportion as atmospheric air, in the water."

In point of fact, liquid air, is a fluid composed almost entirely of nitrogen and caygon and containing a considerably larger
percentage of the latter element than in
the case of free air. And if the liquid be
kept for a time in an open vesset the nitrogen will revert to a gaseous condition
(that is, will evaporate or but off more
rapidly than the oxygent so that the percentage of oxygen continually increases.
Hence the liquefaction of air affords a rapid and economical method of obtaining oxygen for use in chemical and metallargical
operations and for producing intense local
combustion with a curresponding accentuation of temperature.

Atmosphere—Its Production Like—
ity to Become a Great Industry.

Within the past year, since the possibilities of liquid air have come to be a topic of general interest, much has been written concerning its so-called miraculous powers. A few months ago it was be-

"If we disregard the question of chemiand electricity to a large extent, it is not believed that the revolution will be as great as was first anticipated. It is, however, admitted that liquid air is destined to play in the immediate future as conspictions as part commercially as steam and electricity do in the present day.

There is no question in the minds of men who have carefully studied the properties of the powerful iquid that it can be produced in quantities at a sufficiently low cost to make its application eminently practicable. Machinery for producing it has been perfected and tests of its efficiency have been made which plainly indicate the have been made which plainty indicate the opening of a new industry.

Its Tax Abrond,

In France and England liquid air is already employed commercially to advantage, and its use is growing rapidly. In the eastern cities of the United States, notably in New York, Philadelphia, and Boston, companies have been formed and in mechanical practice. Yet this emormous grade of compresses air hitherto employed in mechanical practice. Yet this enormous potentiality of power, equivalent to 10.000 or 12,000 pounds per square inch, can be kept in an ordinary tin can. It is in itself hisralices and inert, and if used as a source of power it requires no massive and weighty reservoirs. Molecular attraction has been expedituated for the compression of the compres has been substituted for steel walls.

Development and Transmission of Power' from central stations, said, among other things: Compressed air transmission is a perfectly general method of distributing power for all purposes. Whether in any given case it is the most advantageous, the least wasteful of power, or the cheapest in working cost, depends on various circumstances. M. Hanarte belisves that it is and will continue to be the most economical method of transmission to considerable distance. The loss in the air mains is very small. The motors worked expansively are efficient. The mains can be carried by any path, and differences of elsvation between the compressing and elevation between the compressing and working points do not sensibly affer the result. In hydraulic transmission, the wa-ter must be collected, stored, and in some cases filtered, and, having actuated a mo-tor, means must be found for removing it. But air is everywhere available, and can be discharged anywhere without causing

American houses for the occessary air compressors and pneumatic tools. Innsmuch, therefore, as liquid air is a varily Cable Routes to Sauth Africa and really is, we must begin by remembering superior form of compressed air its field what we know as to the condition of matter in general. The metal, lead for extent it will not replace steam and elec-

lar changes; they can be frozen by cold and vaporized by heat. Carbonic acid forms part of the atmosphere that surrounds us and is generally in the form of an invisible gas. But if we require it in the form of a liquid we can buy it as such in the market; and we can also obtain it as a solid mass, the change of state from gas to liquid and from liquid to solid being a mere matter of cooling. It is therefore quite in accordance with our general experience that air also should be capable of existing as a gas or as a liquid, or as a solid, according to its degree of heat or sold.

Changes in Market. work than steam, but in many cases it

HAVANA'S WATER MAIN.

be-per An Interesting Engineering Feat Performed by Americans.

WHERE BONDS ARE STORED

A Vault in the Treasury That Excites Great Interest.

One Hundred Thousand Persons Have Visited the Place During the Past Year-Somewhat Old-Pashloned. But Guarded With the Utmost Care-Improvements Needed.

During the past year at least 100,000 trangers have visited the Treseury Department. In other words, that number of persens have been taken through the venilts and had explained to them the various workings of the divisions connected with the Office of the Treasurer. The one place that excites wonder and comment from the average stranger above all others in the hend vault of the Trensury, located on the first floor, north hall, at the extreme west

In this vault are to be found \$107,000,000 in bonds, \$67,000,000 of which, however, are unregistered. These hands belong to the national banks of the county. They are doposited with the Tremusy to secure the circulation of the national bank notes," Every visitor is shown a fittle package of bonds and semetimes permitted to hold for a minate \$5,000,000 of them:

The vanit containing the \$407,000.000 worth of bonds is not quite as large an one would expect in a building the size of the Treasury. But, then, it was built over thirty years ago, and at that time annwered all requirements. Every lach of available space in the want is now occupied. It is claimed the smult is burglarproof and fireproof. There is such network of electric wires connected with the door leading into the vault that any account to dwill a hale into the door would set off burgier sizems, not only at the Treasury proper, but in Palice Headquarters, for

burglar alarm system.

The bonds of the several national banks The bonds of the several national of the country are enclosed in file boxes made of thick paper, such as is used in the construction of paper boxes, but the nie boxes are placed alongside of the file boxes are placed alongside of the others, properly numbered. The shelves on which they rest are of wood. The vanit is illuminated by electric lights, the wires of which are specially protected, so that there is but little danger of fire fro

source.
An official, speaking of this vanit, said An official, speaking of this vanit, said to a Times reporter. "Twenty-five or thirty years ago this vanit was all right, it was fully up to the times, and it was ample to meet all demands, but during that period the country has grown, and today, f believe there is not a bank nowwhere with a rapital of \$50.000 that cannot broad of a vanit far superior to this. It was but recently that modern doers were put on the vanit. The shelving inside should be constructed of metal and the file boxes constructed of metal and the file boxes constructed of metal and the file boxes constructed of metal and the file baxes con-taining the bonds of national banks chould be made of aluminum. There should be see little woodwork on the inside of the vasilt Just think of the weight of Friction is one great source of fires that break out where least expected

"Congress has been asked acreal times to appropriate money for an extension and improvement of the vault, but no approprintion has yet been made. Really the vault is too small; it is way behind the

gress will again be asked at its coming sension to make the vault more modern by providing money to purchase the installing fixtures imentioned and providing against

BRITISH PRESS CENSORSHIP.

(From the New York Tellions.) Last Tuesday it was obvious that "if one

offices of New York.

The Anglo-American company is one principal agent of communication between this country and the seal of war, charming \$1.21 per word for despatches in either Durhan or Cape Town. Its wires end at London, it is true, but it receives and transmits despatches through the Fistern company to the Cape. The Eastern company controls two cable routes one by way of hisban, Gibrahar, Maits, Aden, and the east coast of Africa to lugchan, the sheep by the west coast, to Cape Town.

The former route is by far the more used, and as telegrams in enormous numbers go by the same cables to points lying between London and Adea a great deal of unnecessary labor is spared the Government censors as well as a great deal of unnecessary delay to besiness by catablishing the censorship at Adea rather than further west. No aunouncement of consorship has been made in reference to any point on the west coast route, but it is pretry tertain that, since the route is incumection with both Lisbon and Galia, the authorities at Cape Town will take good care of all messages to South Africa, which come that way.

good care of all messages to South Africa which come that way. How the details of the consorable are to be managed at Aden there is no means of ascertaining here in the Spanish American war all despatches for Cuta hamoed in at the offices had to be vised by the military staff officer in adarge. At Adm the only effective way will be to have the circuit